

Mark Roster

MARK	Description	LAT	LONG
A	R "10" Q R	39° 08.383'	76° 19.357'
B	G "7" Fl G 6s	39° 06.589'	76° 18.293'
C	R "4" Q R	39° 05.651'	76° 17.894'
D	G "1UC" Fl G 4s	39° 04.811'	76° 18.855'
E	RW "LP" Mo(A)	39° 02.580'	76° 20.761'
F	R "4" Fl R 4s	39° 02.261'	76° 22.834'
G	R "10" Fl R 2.5s	39° 04.458'	76° 23.571'
H	R "12" Fl R 4s	39° 05.179'	76° 23.572'
J	R "16" Fl R 6s	39° 06.990'	76° 23.570'
K	G "23" Fl G 4s	39° 09.334'	76° 25.117'
L	G "1M" Q G	39° 12.050'	76° 30.780'
M	Fixed Lt Fl 2.5s 27ft 5M (Poole's Is Bar)	39° 15.707'	76° 16.681'
N	Fixed Lt Fl 2.5s 22ft (Craighill Light)	39° 11.317'	76° 23.664'
P	G "3" Fl G 4s	39° 09.136'	76° 21.135'
R	Fixed Lt Fl 6s 51ft 9M (Sandy Point Light)	39° 00.954'	76° 23.075'
T	Fixed Lt Fl 2.5s 52ft 5M (Baltimore Light)	39° 03.552'	76° 23.940'
W	G C "1"	39° 05.571'	76° 15.251'
X	RN "2"	39° 04.026'	76° 16.344'
Y	Iso W 6s 89 ft (Tolchester Channel Rear Range Light)	39° 07.411' †	76° 20.938' †
Z	Fixed Lt Fl 6s 31ft 7M (Love Pt Light)	39° 03.423'	76° 17.020'
AA	G "3" Q G	39° 10.813'	76° 26.701'

† Indicates revision

Magnetic Bearings Between Marks

Enter Chart Vertically

	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	T	W	X	Y	Z	AA	
A		335	337	354	011	024	040	046	067	102	112	196	131	119	021	036	311	332	052	340	113	A
B	155		342	014	026	039	062	071	096	117	119		139	139	033	055	293	329	112	343	123	B
C	157	162		042	036	049	075	084	107	123	123		142	144	041	066	272	323	127	343	127	C
D	174	194	222		034	050	084	096	121	133	128		150	158	040	072	255	292	148	314	135	D
E	191	206	216	214		079	131	140	154	153		194	166	177	048	111	235	247	178	254	151	E
F	204	219	229	230	259		165	169	173	166		200	176	191	008	146	241	251	196	256		F
G	220	243	255	265	311	345		180	180	166		205	179	202	354	018	260	274	215	282		G
H	226	251	264	276	320	349	360		180	164		207	179	206	355	010	267	282	223	289		H
J	247	276	287	301	334	353	000	000		153		212	179	221	356	005	282	298	258	305	148	J
K	282	297	303	313	333	346	346	344	333		122	226	210	274	349	351	296	308	301	313	140	K
L	293	299	303	308						302				278	291		298	306	301	309	291	L
M	016				014	020	025	027	031	046			051	028	019	025			022		058	M
N	311	319	322	330	346	356	359	359	359	030	098	231		318	357	002	311	322	332	327	078	N
P	299	319	324	338	357	011	022	026	041	094	111	208	138		010	021	308	324	355	331	111	P
R	201	213	221	220	228	188	174	175	176	169		199	177	190		165	233	240	194			R
T	216	235	246	252	291	326	198	190	185	171		205	182	201	346		253	265	211	271		T
W	131	113	092	075	055	061	080	086	102	116	118		131	128	053	073		029	113	033	120	W
X	152	149	143	112	067	071	094	102	118	128	126		142	144	060	085	209		133	041	130	X
Y	232	292	307	328	358	016	035	042	078	121	121	202	152	175	014	031	293	314		323	127	Y
Z	160	163	163	134	074	076	101	109	125	133	129		147	151		091	213	221	143		134	Z
AA	293	303	307	315	331				328	320	111	238	258	291			301	310	307	315		AA

Distances Between Marks (nm)

	B	C	D	E	F	G	H	J	K	L	M	N	P	R	T	W	X	Y	Z	AA	
A	1.98	2.96	3.60	5.91	6.69	5.11	4.58	3.55	4.57	9.59	7.62	4.45	1.57	7.98	6.00	4.25	4.95	1.57	5.28	6.19	A
B		0.99	1.83	4.45	5.59	4.62	4.34	4.12	5.97	11.12		6.31	3.37	6.75	5.34	2.57	2.98	2.21	3.32	7.77	B
C			1.12	3.79	5.12	4.57	4.43	4.61	6.71	11.87		7.23	4.30	6.19	5.14	2.05	2.02	2.95	2.33	8.57	C
D				2.68	4.01	3.68	3.68	4.26	6.64	11.75		7.51	4.68	5.06	4.15	2.90	2.10	3.06	1.99	8.55	D
E					1.64	2.88	3.40	4.92	7.56		13.51	9.03	6.57	2.43	2.65	5.22	3.72	4.84	3.03	9.44	E
F						2.27	2.98	4.77	7.30		14.28	9.09	7.01	1.32	1.55	6.76	5.34	5.36	4.67		F
G							0.72	2.53	5.02		12.46	6.86	5.05	3.53	0.95	6.56	5.63	3.59	5.19		G
H								1.81	4.33		11.81	6.14	4.39	4.25	1.65	6.47	5.73	3.03	5.39		H
J									2.63		10.23	4.33	2.86	6.05	3.45	6.61	6.35	2.09	6.21	4.53	J
K										5.17	9.14	2.28	3.10	8.53	5.86	8.53	8.64	3.77	8.63	1.92	K
L												5.57	8.03			13.68	13.79	8.94	13.73	3.40	L
M												6.97	7.43	15.57	13.40			8.93		9.18	M
N													2.93	10.38	7.77	8.70	9.25	4.44	9.43	2.41	N
P														8.33	6.00	5.80	6.32	1.73	6.55	4.63	P
R															2.69	7.64	6.07	6.67			R
T																7.05	5.92	4.51	5.38		T
W																	1.76	4.78	2.55	10.32	W
X																		4.92	0.80	10.52	X
Y																			5.02	5.62	Y
Z																				10.54	Z

Chesapeake Bay Yacht Racing Association
Region 2 Race Marks
 Chesapeake Bay Area
2023

Positions from
 USCG Light List Volume II Atlantic Coast 2023
 LNM Dist. 5 Week 26/23

Last updated: July 3, 2023
 Computed by: Scott Kirwin

Chesapeake Bay Yacht Racing Association

Region 2 Race Marks - Chesapeake Bay Area

Mark Roster

MARK	Description	LAT	LONG
A	R "10" Q R	39° 08.383'	76° 19.357'
B	G "7" Fl G 6s	39° 06.589'	76° 18.293'
C	R "4" Q R	39° 05.651'	76° 17.894'
D	G "1UC" Fl G 4s	39° 04.811'	76° 18.855'
E	RW "LP" Mo(A)	39° 02.580'	76° 20.761'
F	R "4" Fl R 4s	39° 02.261'	76° 22.834'
G	R "10" Fl R 2.5s	39° 04.458'	76° 23.571'
H	R "12" Fl R 4s	39° 05.179'	76° 23.572'
J	R "16" Fl R 6s	39° 06.990'	76° 23.570'
K	G "23" Fl G 4s	39° 09.334'	76° 25.117'
L	G "1M" Q G	39° 12.050'	76° 30.780'
M	Fixed Lt Fl 2.5s 27ft 5M (Poole's Is Bar)	39° 15.707'	76° 16.681'
N	Fixed Lt Fl 2.5s 22ft (Craighill Light)	39° 11.317'	76° 23.664'
P	G "3" Fl G 4s	39° 09.136'	76° 21.135'
R	Fixed Lt Fl 6s 51ft 9M (Sandy Point Light)	39° 00.954'	76° 23.075'
T	Fixed Lt Fl 2.5s 52ft 5M (Baltimore Light)	39° 03.552'	76° 23.940'
W	G C "1"	39° 05.571'	76° 15.251'
X	R N "2"	39° 04.026'	76° 16.344'
Y	Iso W 6s 89 ft (Tolchester Channel Rear Range Light)	39° 07.411' †	76° 20.938' †
Z	Fixed Lt Fl 6s 31ft 7M (Love Pt Light)	39° 03.423'	76° 17.020'
AA	G "3" Q G	39° 10.813'	76° 26.701'

† Indicates revision

Chesapeake Bay Yacht Racing Association

Region 2 Race Marks - Chesapeake Bay Area

Magnetic Bearings Between Marks

Enter Chart Vertically

	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	T	W	X	Y	Z	AA	
A		335	337	354	011	024	040	046	067	102	112	196	131	119	021	036	311	332	052	340	113	A
B	155		342	014	026	039	062	071	096	117	119		139	139	033	055	293	329	112	343	123	B
C	157	162		042	036	049	075	084	107	123	123		142	144	041	066	272	323	127	343	127	C
D	174	194	222		034	050	084	096	121	133	128		150	158	040	072	255	292	148	314	135	D
E	191	206	216	214		079	131	140	154	153		194	166	177	048	111	235	247	178	254	151	E
F	204	219	229	230	259		165	169	173	166		200	176	191	008	146	241	251	196	256		F
G	220	243	255	265	311	345		180	180	166		205	179	202	354	018	260	274	215	282		G
H	226	251	264	276	320	349	360		180	164		207	179	206	355	010	267	282	223	289		H
J	247	276	287	301	334	353	000	000		153		212	179	221	356	005	282	298	258	305	148	J
K	282	297	303	313	333	346	346	344	333		122	226	210	274	349	351	296	308	301	313	140	K
L	293	299	303	308						302			278	291			298	306	301	309	291	L
M	016				014	020	025	027	031	046			051	028	019	025			022		058	M
N	311	319	322	330	346	356	359	359	359	030	098	231		318	357	002	311	322	332	327	078	N
P	299	319	324	338	357	011	022	026	041	094	111	208	138		010	021	308	324	355	331	111	P
R	201	213	221	220	228	188	174	175	176	169		199	177	190		165	233	240	194			R
T	216	235	246	252	291	326	198	190	185	171		205	182	201	346		253	265	211	271		T
W	131	113	092	075	055	061	080	086	102	116	118		131	128	053	073		029	113	033	120	W
X	152	149	143	112	067	071	094	102	118	128	126		142	144	060	085	209		133	041	130	X
Y	232	292	307	328	358	016	035	042	078	121	121	202	152	175	014	031	293	314		323	127	Y
Z	160	163	163	134	074	076	101	109	125	133	129		147	151		091	213	221	143		134	Z
AA	293	303	307	315	331				328	320	111	238	258	291			301	310	307	315		AA

Chesapeake Bay Yacht Racing Association

Region 2 Race Marks - Chesapeake Bay Area

Distances Between Marks (nm)

	B	C	D	E	F	G	H	J	K	L	M	N	P	R	T	W	X	Y	Z	AA	
A	1.98	2.96	3.60	5.91	6.69	5.11	4.58	3.55	4.57	9.59	7.62	4.45	1.57	7.98	6.00	4.25	4.95	1.57	5.28	6.19	A
B		0.99	1.83	4.45	5.59	4.62	4.34	4.12	5.97	11.12		6.31	3.37	6.75	5.34	2.57	2.98	2.21	3.32	7.77	B
C			1.12	3.79	5.12	4.57	4.43	4.61	6.71	11.87		7.23	4.30	6.19	5.14	2.05	2.02	2.95	2.33	8.57	C
D				2.68	4.01	3.68	3.68	4.26	6.64	11.75		7.51	4.68	5.06	4.15	2.90	2.10	3.06	1.99	8.55	D
E					1.64	2.88	3.40	4.92	7.56		13.51	9.03	6.57	2.43	2.65	5.22	3.72	4.84	3.03	9.44	E
F						2.27	2.98	4.77	7.30		14.28	9.09	7.01	1.32	1.55	6.76	5.34	5.36	4.67		F
G							0.72	2.53	5.02		12.46	6.86	5.05	3.53	0.95	6.56	5.63	3.59	5.19		G
H								1.81	4.33		11.81	6.14	4.39	4.25	1.65	6.47	5.73	3.03	5.39		H
J									2.63		10.23	4.33	2.86	6.05	3.45	6.61	6.35	2.09	6.21	4.53	J
K										5.17	9.14	2.28	3.10	8.53	5.86	8.53	8.64	3.77	8.63	1.92	K
L												5.57	8.03			13.68	13.79	8.94	13.73	3.40	L
M												6.97	7.43	15.57	13.40			8.93		9.18	M
N													2.93	10.38	7.77	8.70	9.25	4.44	9.43	2.41	N
P														8.33	6.00	5.80	6.32	1.73	6.55	4.63	P
R															2.69	7.64	6.07	6.67			R
T																7.05	5.92	4.51	5.38		T
W																	1.76	4.78	2.55	10.32	W
X																		4.92	0.80	10.52	X
Y																4.78			5.02	5.62	Y
Z																		5.02		10.54	Z
	B	C	D	E	F	G	H	J	K	L	M	N	P	R	T	W	X	Y	Z	AA	

Mark Roster

MARK	Description	LAT	LONG
AA	G "3" Q G	39° 10.813'	76° 26.701'
BB	G "9" Fl G 6s	39° 11.148'	76° 27.809'
CC	G "9" Fl 4s	39° 11.487'	76° 28.935'
DD	G "11" Fl 6s	39° 11.693'	76° 29.616'
FF	R N "2"	39° 10.845'	76° 30.298'
GG	R "8" Q R	39° 13.711'	76° 32.305'
HH	R "10A" Fl R 4s	39° 14.273'	76° 32.898'
JJ	RG "NH" Fl (2+1) R 6s	39° 16.213'	76° 34.570'
KK	G "5" Q G	39° 14.682'	76° 32.544'
LL	R "6" Fl R 4s	39° 13.330'	76° 31.902'
MM	G "11" Fl G 2.5s	39° 15.151'	76° 32.874'
NN	GR "FM" Fl(2+1) G 6s	39° 15.397'	76° 34.306'
OO	R "16" Q R	39° 14.943'	76° 33.607'
PP	G C "11"	39° 14.395'	76° 33.263'
RR	G "3" Fl G 2.5s	39° 13.275'	76° 32.575'
SS	G "9" Fl G 4s	39° 13.801'	76° 32.632'
TT	R "8" Fl R 2.5s	39° 15.303'	76° 33.214'
K	G "23" Fl G 4s	39° 09.334'	76° 25.117'
L	G "IM" Q G	39° 12.050'	76° 30.780'

† Indicates revision

Magnetic Bearings Between Marks

		Enter Chart Vertically																			
		AA	BB	CC	DD	FF	GG	HH	JJ	KK	LL	MM	NN	OO	PP	RR	SS	TT	K	L	
AA			111	111	111	091	124	126	131	130	122	132	128	128	125	118	123	132	320	111	AA
BB	291			111	111	081	126	128	134	134	125	136	130	130	128	120	125	135	311	111	BB
CC	291	291			111	059	130	132	137	139	129	140	133	134	131	122	129	139	306	111	CC
DD	291	291	291			032	134	135	140	143	133	144	136	136	134	125	132	142	304	112	DD
FF	271	261	239	212			151	150	148	156	153	155	146	148	147	144	149	153	291	163	FF
GG	304	306	310	314	332			141	145	169	321	163	137	141	133	026	110	156	308	325	GG
HH	306	308	312	315	330	321			146	214	321	181	136	141	113	346	336	167	309	324	HH
JJ	312	314	317	320	328	325	326			314	324	309	346	330	331	332	328	311	313	325	JJ
KK	311	314	319	323	336	349	034	134			340	151	118	108	063	001	004	140	313	333	KK
LL	302	305	309	313	333	141	141	144	160			158	138	141	135	084	130	153	307	326	LL
MM	312	316	320	324	335	343	001	129	331	338			103	070	022	353	352	120	314	332	MM
NN	308	310	313	316	326	317	316	166	298	318	283			310	321	328	321	276	310	321	NN
OO	308	310	314	316	328	321	321	150	288	321	250	130			334	334	327	220	310	323	OO
PP	305	308	311	314	327	313	293	151	243	315	202	141	154			335	321	182	309	321	PP
RR	298	300	302	305	324	206	166	152	181	264	172	148	154	155			175	166	304	311	RR
SS	303	305	309	312	329	290	156	148	184	310	173	141	147	141	355			163	308	321	SS
TT	312	315	319	322	333	336	347	131	320	333	300	096	040	002	346	343			314	330	TT
K	140	131	126	124	111	128	129	133	133	127	134	130	130	129	124	127	134			122	K
L	291	291	292	292	343	145	144	145	153	146	152	141	143	141	131	141	150	302			L
AA	BB	CC	DD	FF	GG	HH	JJ	KK	LL	MM	NN	OO	PP	RR	SS	TT	K	L			

Distances Between Marks (nm)

	BB	CC	DD	FF	GG	HH	JJ	KK	LL	MM	NN	OO	PP	RR	SS	TT	K	L				
AA	0.92	1.86	2.43	2.79	5.22	5.92	8.15	5.96	4.76	6.46	7.47	6.76	6.22	5.18	5.49	6.76	1.92	3.40			AA	
BB		0.94	1.50	1.95	4.33	5.04	7.29	5.10	3.85	5.61	6.59	5.89	5.33	4.27	4.59	5.90	2.77	2.47			BB	
CC			0.57	1.24	3.43	4.15	6.44	4.25	2.95	4.77	5.71	5.01	4.44	3.34	3.68	5.06	3.66	1.54			CC	
DD				1.00	2.90	3.62	5.93	3.75	2.41	4.28	5.19	4.49	3.91	2.79	3.15	4.56	4.21	0.97			DD	
FF					3.26	3.98	6.31	4.22	2.78	4.75	5.51	4.84	4.23	3.01	3.47	5.00	4.29	1.26			FF	
GG						0.73	3.06	0.99	0.49	1.51	2.29	1.59	1.01	0.48	0.27	1.74	7.09	2.04			GG	
HH							2.33	0.49	1.22	0.88	1.57	0.87	0.31	1.03	0.52	1.06	7.80	2.77			HH	
JJ								2.19	3.55	1.69	0.84	1.47	2.08	3.32	2.84	1.39	10.06	5.10			JJ	
KK										1.44	0.53	1.54	0.86	0.63	1.41	0.89	0.81	7.86	2.97		KK	
LL											1.97	2.78	2.09	1.50	0.53	0.74	2.22	6.61	1.55		LL	
MM												1.14	0.60	0.81	1.89	1.36	0.30	8.37	3.50		MM	
NN													0.71	1.29	2.51	2.06	0.85	9.36	4.32		NN	
OO														0.61	1.85	1.37	0.47	8.65	3.63		OO	
PP															1.24	0.77	0.91	8.10	3.03		PP	
RR																0.53	2.09	7.00	1.86		RR	
SS																	1.57	7.34	2.26		SS	
TT																			8.67	3.76		TT
K																				5.17		K
BB	CC	DD	FF	GG	HH	JJ	KK	LL	MM	NN	OO	PP	RR	SS	TT	K	L					

Chesapeake Bay Yacht Racing Association

Region 2 Race Marks

Patapsco River Area

2023

Positions from
USCG Light List Volume II Atlantic Coast 2023
LNM Dist. 5 Week 26/23

Last updated: July 3, 2023
Computed by: Scott Kirwin

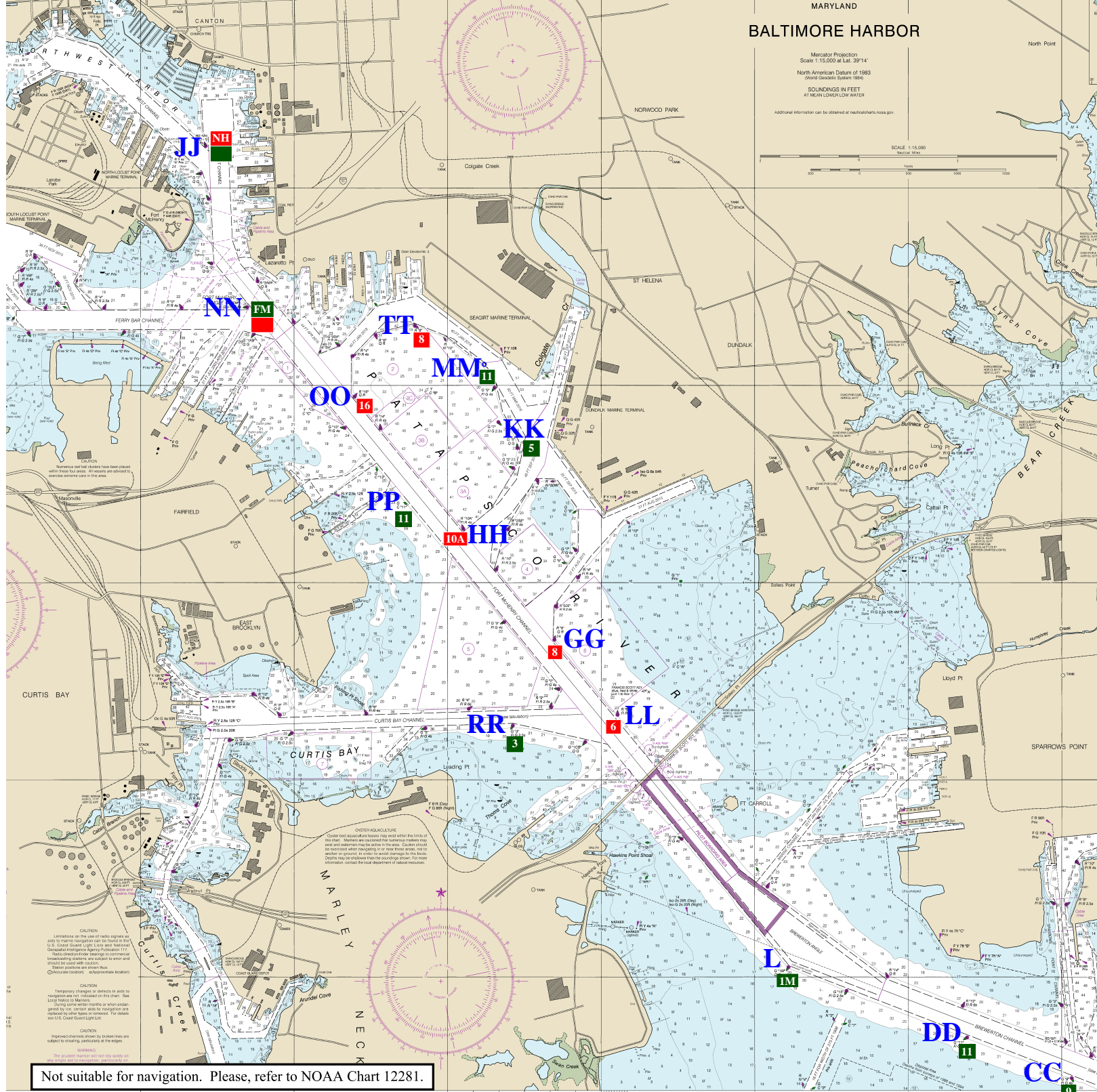
BALTIMORE HARBOR

Mercator Projection
Scale 1:15,000 at Lat. 39°14'
North American Datum of 1983
(World Geodetic System 1984)
SOUNDINGS IN FEET
AT MEAN LOW WATER

Additional information can be obtained at nauticalcharts.noaa.gov.

SCALE 1:15,000

Nautical Miles
0 500 1000



Not suitable for navigation. Please, refer to NOAA Chart 12281.

Chesapeake Bay Yacht Racing Association

Region 2 Race Marks - Patapsco River Area

Mark Roster

MARK	Description	LAT	LONG
AA	G "3" Q G	39° 10.813'	76° 26.701'
BB	G "7" FI G 6s	39° 11.148'	76° 27.809'
CC	G "9" FI 4s	39° 11.487'	76° 28.935'
DD	G "11" FI 6s	39° 11.693'	76° 29.616'
FF	R N "2"	39° 10.845'	76° 30.298'
GG	R "8" Q R	39° 13.711'	76° 32.305'
HH	R "10A" FI R 4s	39° 14.273'	76° 32.898'
JJ	RG "NH" FI (2+1) R 6s	39° 16.213'	76° 34.570'
KK	G "5" Q G	39° 14.682'	76° 32.544'
LL	R "6" FI R 4s	39° 13.330'	76° 31.902'
MM	G "11" FI G 2.5s	39° 15.151'	76° 32.874'
NN	GR "FM" FI(2+1) G 6s	39° 15.397'	76° 34.306'
OO	R "16" Q R	39° 14.943'	76° 33.607'
PP	G C "11"	39° 14.395'	76° 33.263'
RR	G "3" FI G 2.5s	39° 13.275'	76° 32.575'
SS	G "9" FI G 4s	39° 13.801'	76° 32.632'
TT	R "8" FI R 2.5s	39° 15.303'	76° 33.214'
K	G "23" FI G 4s	39° 09.334'	76° 25.117'
L	G "1M" Q G	39° 12.050'	76° 30.780'

† Indicates revision

Computed by: Scott Kirwin

Last updated: July 3, 2023

Chesapeake Bay Yacht Racing Association

Region 2 Race Marks - Patapsco River Area

Magnetic Bearings Between Marks

Enter Chart Vertically

	AA	BB	CC	DD	FF	GG	HH	JJ	KK	LL	MM	NN	OO	PP	RR	SS	TT	K	L	
AA		111	111	111	091	124	126	131	130	122	132	128	128	125	118	123	132	320	111	AA
BB	291		111	111	081	126	128	134	134	125	136	130	130	128	120	125	135	311	111	B
CC	291	291		111	059	130	132	137	139	129	140	133	134	131	122	129	139	306	111	C
DD	291	291	291		032	134	135	140	143	133	144	136	136	134	125	132	142	304	112	D
FF	271	261	239	212		151	150	148	156	153	155	146	148	147	144	149	153	291	163	E
GG	304	306	310	314	332		141	145	169	321	163	137	141	133	026	110	156	308	325	F
HH	306	308	312	315	330	321		146	214	321	181	136	141	113	346	336	167	309	324	G
JJ	312	314	317	320	328	325	326		314	324	309	346	330	331	332	328	311	313	325	H
KK	311	314	319	323	336	349	034	134		340	151	118	108	063	001	004	140	313	333	J
LL	302	305	309	313	333	141	141	144	160		158	138	141	135	084	130	153	307	326	K
MM	312	316	320	324	335	343	001	129	331	338		103	070	022	353	352	120	314	332	L
NN	308	310	313	316	326	317	316	166	298	318	283		310	321	328	321	276	310	321	M
OO	308	310	314	316	328	321	321	150	288	321	250	130		334	334	327	220	310	323	N
PP	305	308	311	314	327	313	293	151	243	315	202	141	154		335	321	182	309	321	P
RR	298	300	302	305	324	206	166	152	181	264	173	148	154	155		175	166	304	311	R
SS	303	305	309	312	329	290	156	148	184	310	172	141	147	141	355		163	308	321	T
TT	312	315	319	322	333	336	347	131	320	333	300	096	040	002	346	343		314	330	W
K	140	131	126	124	111	128	129	133	133	127	134	130	130	129	124	127	134		122	X
L	291	291	292	292	343	145	144	145	153	146	152	141	143	141	131	141	150	302		Z
AA																				

Chesapeake Bay Yacht Racing Association

Region 2 Race Marks - Patapsco River Area

Distances Between Marks (nm)

	BB	CC	DD	FF	GG	HH	JJ	KK	LL	MM	NN	OO	PP	RR	SS	TT	K	L	
AA	0.92	1.86	2.43	2.79	5.22	5.92	8.15	5.96	4.76	6.46	7.47	6.76	6.22	5.18	5.49	6.76	1.92	3.40	AA
BB		0.94	1.50	1.95	4.33	5.04	7.29	5.10	3.85	5.61	6.59	5.89	5.33	4.27	4.59	5.90	2.77	2.47	BB
CC			0.57	1.24	3.43	4.15	6.44	4.25	2.95	4.77	5.71	5.01	4.44	3.34	3.68	5.06	3.66	1.54	CC
DD				1.00	2.90	3.62	5.93	3.75	2.41	4.28	5.19	4.49	3.91	2.79	3.15	4.56	4.21	0.97	DD
FF					3.26	3.98	6.31	4.22	2.78	4.75	5.51	4.84	4.23	3.01	3.47	5.00	4.29	1.26	FF
GG						0.73	3.06	0.99	0.49	1.51	2.29	1.59	1.01	0.48	0.27	1.74	7.09	2.04	GG
HH							2.33	0.49	1.22	0.88	1.57	0.87	0.31	1.03	0.52	1.06	7.80	2.77	HH
JJ								2.19	3.55	1.69	0.84	1.47	2.08	3.32	2.84	1.39	10.06	5.10	JJ
KK									1.44	0.53	1.54	0.86	0.63	1.41	0.89	0.81	7.86	2.97	KK
LL										1.97	2.78	2.09	1.50	0.53	0.74	2.22	6.61	1.55	LL
MM											1.14	0.60	0.81	1.89	1.36	0.30	8.37	3.50	MM
NN												0.71	1.29	2.51	2.06	0.85	9.36	4.32	NN
OO													0.61	1.85	1.37	0.47	8.65	3.63	OO
PP														1.24	0.77	0.91	8.10	3.03	PP
RR															0.53	2.09	7.00	1.86	RR
SS																1.57	7.34	2.26	SS
TT																	8.67	3.76	TT
K																		5.17	K
	BB	CC	DD	FF	GG	HH	JJ	KK	LL	MM	NN	OO	PP	RR	SS	TT	K	L	